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MISSION STATEMENT

Identified in Department of Energy (DOE) Order 460.2, Departmental Materials Transportation and Packaging Management, the National Transportation Program, Albuquerque (NTP-A) and DOE Field Offices have the responsibility to ensure that all transportation and packaging operations across the DOE complex are fully compliant with all applicable international, federal, state, tribal, and local laws, rules, and regulations. The NTP-A Transportation Compliance Evaluation/Assistance Program (TCEAP) establishes a systematic approach for DOE (Headquarters, Programs, Field Offices, and contractors) to evaluate and enhance transportation and packaging regulatory and DOE policy compliance. This systematic approach provides a management tool for maintaining compliance with regulatory requirements, providing access to methodologies that enhance management and operational practices, and addressing stakeholder concerns through effective interaction.

TCEAP PROCESS

TCEAP evaluation teams, consisting of subject-matter experts, will collect information to establish that overall program objectives are being achieved. The process will verify whether international, federal, state, tribal, and local regulations and DOE Order requirements are effectively implemented. This process allows senior DOE or contractor management to identify problems, prepare and implement corrective actions, identify and build on strengths, and manage DOE transportation activities more effectively, while enhancing the level of regulatory compliance and safety fitness.

Through this process, TCEAP evaluation teams endeavor to assist transportation and packaging personnel in finding the cause(s) behind deficiencies, and foster development of management or procedural systems that continually maximize regulatory compliance, increase efficiency, enhance worker safety, and provide a method of demonstrating continuous improvement.

TCEAP evaluations and/or assistance can be performed in one of three ways. The first allows the individual contractor transportation and packaging operations within each site to utilize the TCEAP checklists to perform a self-assessment. This self-assessment can be a valuable tool to each operational unit to identify any deficiencies in its level of regulatory compliance, safety fitness, or management systems.

The second is the scheduling and performing of an onsite visit by NTP-A and/or the responsible DOE Field Office to ensure compliance with applicable regulations and requirements that are specific to the contractor's transportation and packaging contract activities.

The third is to provide assistance to Field Offices and contractors in identifying the root cause(s) of non-compliant activities, developing corrective actions to bring the activities into compliance, and improving the overall management systems.

During any self-assessment, onsite evaluation, or assistance activity, contractor management strengths, weaknesses, and any observations or recommendations related to the fundamental objectives listed in section 5.0 Technical Evaluation Performance Objective criteria, should be characterized and communicated in a report format that is clear, concise and useful. The recommended report format for TCEAP evaluations is listed in Standard Operating Procedure NTP-A-TCEAP.002, Section 4.4. This report will ensure that the proper requirements and objectives are identified and executed in a timely, effective, and efficient manner. Deficiencies identified in fundamental performance objectives can be indicative of impediments to achieving effective and efficient management operations systems performance. Underlying implications of deficiencies should be pursued by the evaluation team and the root cause(s) identified to ensure that corrective actions can be taken. TCEAP assistance is provided through technical expert evaluation and recommendations to Field Offices and DOE contractors in addressing management processes and operations improvements.

MANAGEMENT PLAN

1.0 PURPOSE

The purpose of this management plan is to describe the system used by the Department of Energy (DOE), as assigned to NTP-A and DOE Field Offices, to administer TCEAP.

2.0 SCOPE

This plan describes the systematic approach used by NTP-A and Field Offices to perform transportation and packaging evaluation activities based on documented criteria, procedures, and requirements (applicable international, federal, state, tribal, and local laws, rules, and regulations; DOE Orders, directives and policies; and industry-accepted best management practices). The plan also describes the NTP-A and Field Office approach for providing transportation and packaging assistance to DOE facilities to promote safety, economy, and efficiency, and to ensure contractor transportation and packaging operations regulatory compliance.

3.0 RESPONSIBILITIES

The following personnel/organizations are responsible for the indicated activities:

- NTP-A and/or Field Office: Provides functional oversight and approval of TCEAP activities.
- Evaluation Team Leader: Assumes a leadership role during pre-evaluation, evaluation, and post-evaluation activities. The Evaluation Team Leader also provides contractor management interface. The Evaluation Team Leader must be NTP-A and/or DOE Field Office or a designated DOE employee.
- Evaluation Program Coordinator (EPC): A DOE employee or contractor who will coordinate, implement, and administer TCEAP activities. The EPC will assist NTP-A and/or the Field Office in the selection of members for the evaluation team and in organizing and directing the evaluation process.
- Evaluation Team Member(s): An individual (subject-matter expert), by qualification of experience, training, and/or education who participates in the evaluation.

4.0 PERSONNEL TRAINING AND QUALIFICATIONS

NTP-A will maintain for Field Office use, a roster of personnel qualified to participate as members of TCEAP evaluation/assistance teams. Selection of personnel to participate on evaluation and/or assistance teams shall be based upon qualification including training and experience commensurate with the scope and complexity of the operation, activity, organization, or site being evaluated.

General qualifications for Evaluation Team Members include:

- not have any direct responsibility for performance of operations or activities being evaluated
- have successfully completed recognized training meeting DOE and/or equivalent training approved by NTP-A or the responsible DOE Field Office

NOTE: Participants that have experience commensurate with the scope and complexity of evaluation and assistance activities to be performed may be utilized until required training is successfully completed

- be aware of and understand applicable TCEAP procedures and the TCEAP Management Plan
- have additional qualifications that may be required for specific transportation management-related issues as approved by NTP-A
- must be computer literate with good writing and oral communication skills

5.0 TECHNICAL EVALUATION PERFORMANCE OBJECTIVE CRITERIA

TCEAP Performance Objectives are used by evaluation team members as part of the compliance checklists. These Performance Objectives are thesis statements representing the overall performance objective the evaluators will use for that particular checklist. For the most part, the performance objectives will address the development and implementation of policies and procedures in a consistent and accountable manner for the activities identified in the checklist. The Performance Objectives identified for the TCEAP program are:

5.1 General Management of Transportation and Packaging Programs: Management has developed and implemented a Quality Assurance Plan, a Transportation Safety Document (TSD), and if applicable, a Transportation Plan that includes directives, policies, and procedures to provide effective implementation of applicable international, federal, state, tribal, and local rules and regulations and DOE Orders and policy affecting transportation management.

5.2 Hazardous and Radioactive Materials Packaging: A documented packaging procurement/selection program, which includes written policies and procedures (e.g., quality assurance), that identifies steps taken to ensure selection of an appropriate packaging for the hazardous or radioactive material to be transported. These policies and procedures must be

in compliance with the requirements of applicable international, federal, state, tribal, and local laws, rules, and regulations and DOE Orders and policy.

- 5.3 Hazardous and Radioactive Materials Shipper:** Shipping of all classes and divisions of hazardous materials (including radioactive) and waste shipments are conducted in a consistent and accountable manner, following approved procedures, in compliance with requirements of applicable international, federal, state, tribal, and local laws, rules, and regulations and DOE Orders and policy.
- 5.4 Transportation Management Operations:** All Transportation Management Operations are conducted in a consistent and accountable manner, following approved procedures, in compliance with all requirements of applicable international, federal, state, tribal, and local laws, rules, and regulations and DOE Orders and policy.
- 5.5 Motor Carrier Operations:** All Motor Carrier Operations are conducted in a consistent and accountable manner, following approved procedures, in compliance with the requirements of applicable international, federal, state, tribal, and local laws, rules, and regulations and DOE Orders and policy.
- 5.6 Railroad Operations:** All DOE-owned or leased railroad operations and maintenance are performed in a consistent and accountable manner, following approved procedures, in compliance with federal regulations and DOE Orders and policy.
- 5.7 Transportation Emergency Response:** Transportation Emergency Response for hazardous materials (including radioactive) and waste shipments is provided in a consistent and accountable manner, following approved procedures, in compliance with requirements of applicable international, federal, state, tribal, and local laws, rules, and regulations and DOE Orders and policy.
- 5.8 HAZMAT Employee Training:** The HAZMAT employer (as defined in 49 CFR 171.8) has identified HAZMAT employees (as defined in 49 CFR 171.8) who are required to have HAZMAT training per 49 CFR 172.700. These personnel are trained, and appropriate documentation is provided and maintained in compliance with requirements of applicable international and federal regulations for the training of HAZMAT personnel.

6.0 PROGRAM DESCRIPTION

TCEAP has been established to assist contractors in the process of evaluating, enhancing, and standardizing transportation and packaging regulatory and policy compliance across the DOE complex. The program is intended to be a useful tool for maintaining or coming into full compliance with applicable regulatory requirements, and operational methodologies that enhance operation management practices.

TCEAP was developed to implement requirements and guidance of applicable DOE Orders, international, federal, state, tribal, and local laws, rules, and regulations. The program consists of the TCEAP Management Plan, Standard Operating Procedures (SOPs), and Checklists. The TCEAP Management Plan provides the purpose, mission, and administrative guidelines for TCEAP. The

Standard Operating Procedures and Checklists are stand-alone documents supporting the TCEAP Management Plan. The SOPs provide self-assessment, evaluation, and assistance guidance while the Checklists provide evaluation criteria.

TCEAP activities are conducted at various DOE contractor transportation and packaging operations and will include, but not be limited to:

- evaluation of contractor programs for international, federal, state, tribal, and local regulatory compliance
- evaluation of contractor programs for DOE Orders, directives, and policy compliance
- evaluation of contractor transportation and packaging management programs
- evaluation of contractor self-assessments as required by the appropriate Field Office and evaluation results provided to NTP-A
- evaluation of contractor transportation and packaging operations utilizing regulatory indicators dealing with safety, efficiency, economy, and best management practices

DOE Order 460.2 requires that DOE Field Elements conduct compliance assessments of transportation and packaging operations no less than every three years at each DOE contractor facility in accordance with TCEAP. DOE Order 460.2 also requires that NTP-A conduct technical assessments of DOE Field Elements, including related contractors, and as needed provides assistance in transportation and packaging management activities to ensure compliance with applicable requirements. NTP-A has developed a separate evaluation program dealing with the specifics of DOE Field Element requirements and responsibilities, which is not a part of the TCEAP.

TCEAP consists of three individual activities. The first allows the DOE Field Office to instruct or the contractor to self-impose the conduct of self-assessments utilizing the checklists developed for TCEAP. If requested or self-imposed, the contractors will then submit the completed checklists to the appropriate Field Office. The Field Office will review these self-assessments to determine if an onsite evaluation is necessary. The second activity allows for the scheduling by NTP-A and/or Field Office of the onsite visit to perform an evaluation of the contractor transportation and packaging management systems and processes in place. The third activity allows NTP-A and/or the Field Office to provide technical assistance to the contractor to improve the management systems of contractor transportation and packaging management programs.

The first activity allows the individual transportation and packaging operations of each contractor to utilize the TCEAP checklists to perform a self-assessment. This self-assessment can be a valuable tool to each operational unit to identify any deficiencies in its level of regulatory compliance or management systems. This self-assessment provides the baseline by which the Field Offices may perform their required compliance evaluations of their contractor transportation and packaging operations.

The second activity is the scheduling of an onsite visit by the responsible Field Office in conjunction with NTP-A (when appropriate) to ensure compliance with the requirements and guidance that are specific to contractor transportation and packaging activities.

When activities 1 and/or 2 are being performed, the organization requesting a self-assessment or onsite evaluation should also request additional information as contained in various DOE databases regarding the contractor's transportation activities. Databases such as Occurrence Reporting and Processing System (ORPS), Enterprise Transportation Analysis System (ETAS), Safety Metric and Indicator Program (SMIP), and Radioactive Materials Incident Report (RMIR) should be queried as to contractor transportation activities for previous periods of time. This information will assist the self-assessment and onsite evaluation activity in identifying previous or current deficiencies that may need further attention, clarification, or correction.

The third activity is intended to assist Field Offices and/or contractors in identifying the root cause(s) of noncompliant activities, developing corrective actions to bring the activities into compliance, and improving the overall management systems. These activities will be addressed as requested by the Field Office or contractor transportation and/or packaging management organizations.

6.1 Activity One: Use of the Checklists as a Self-Assessment Document

The Field Office will provide each contractor transportation and packaging operation at sites under its responsibility, the TCEAP Management Plan, the appropriate NTP-A-TCEAP procedure, and checklists to be completed. A complete assessment of the contractor's transportation and packaging operations is to be performed every three years.

The contractor will complete the self-assessment utilizing the checklists and following the instructions in Section 7.0 of this document and procedure NTP-A-TCEAP.001, and submit the self-assessment to the requesting Field Office.

The Field Office will perform an evaluation of the contractor(s) self-assessment.

The Field Office will issue a disposition letter to the contractor reporting the results of the self-assessment evaluation. The letter will communicate any issues, concerns, or discrepancies discovered while reviewing the contractor(s) self-assessment(s). A copy of the disposition letter will be sent to NTP-A.

The contractor will respond to issues in the disposition letter including any additional information needed to clarify issues or concerns or a corrective action plan if necessary.

The Field Office will track issues, close issues, or, if appropriate, proceed with onsite TCEAP activities as defined in procedure NTP-A-TCEAP.002.

The Field Office will issue a final closeout letter to the contractor(s) that may include notification for an onsite TCEAP. A copy of the final closeout letter will be sent to NTP-A.

6.2 Activity Two: NTP-A and/or Field Office Compliance Evaluations

The Field Office may conduct an onsite TCEAP utilizing the contractor's completed self-assessment(s) (TCEAP checklists) and following the requirements of procedure NTP-A-TCEAP.002.

The Field Office will determine where, when, and how many transportation and/or packaging evaluation/assistance activities will take place each fiscal year. Requests for personnel and financial assistance should be made to NTP-A far enough in advance for the next year's budget cycle.

The Field Office is responsible for contractor selection based on the following criteria:

1. High-visibility concerns associated with transportation and packaging operations that could cause adverse safety conditions, or conditions of noncompliance with regulatory or policy requirements
2. Stakeholder concerns (e.g., Congressional inquiries, tribal concerns, state and local area inquiries) that require evaluation of transportation and packaging activities conducted at a specific site or a specific contractor
3. Previous concerns/unresolved issues from transportation-related assessments, evaluations, or appraisals (e.g., Tiger Teams, Safety & Health Technical Safety Appraisals, contractor self-assessments, Field Office appraisals, ORPS, SMIP, etc.)
4. Initiation of shipment campaigns that could invoke high levels of institutional concern
5. Changes in site management contractors
6. Significant changes in transportation and/or packaging management personnel
7. Request from contractors to provide an evaluation of their management organizations and/or operations program

Procedure NTP-A-TCEAP.002 specifies the approach for planning, conducting, documenting, reporting, follow-up, and closeout of all TCEAP evaluation activities. Each Field Office is responsible for implementing this procedure in conducting onsite TCEAP activities.

The final report documents the TCEAP activity for that contractor. An example of the suggested final report format can be found in procedure NTP-A-TCEAP.002, Section 4.4.

6.3 Activity Three: NTP-A and/or Field Office Technical Assistance

The Technical Assistance activity of the evaluation activity is an important part of TCEAP. Without management system improvement, the previous activity of TCEAP only serves to point out deficiencies in the system without offering potential solutions to the problems. The focus of TCEAP is to assist transportation and packaging personnel in finding the cause(s) behind deficiencies, and to assist in the development of management systems that continually maximize regulatory compliance, increase efficiency, and enhance worker safety. The two parts of the Technical Assistance activity are:

- technical assistance is offered by the team throughout the evaluation activities by offering recommendations based on recognized transportation and business practices and identifying information and training sources,

- when requested, subject-matter experts can assist with in-depth root cause analysis, action plan development, action implementation, implementation verification, and the development of statistical monitoring tools to evaluate the effectiveness of implemented action(s). All requests are contingent on availability of resources. This activity is identified in procedure NTP-A-TCEAP.003

Assistance may be required in any functional area covered by TCEAP evaluations. Technical assistance may include, but is not limited to:

- technical assistance in DOE issues involved with high-visibility shipment campaigns
- regulatory review and clarification
- assistance in identifying and locating training or special assistance to increase and enhance worker safety
- performing formal root cause analysis techniques to arrive at, and document, fundamental causes of inadequacies that, if corrected, will prevent recurrence of the safety concern, noncompliant condition, or deviation from best management practice
- follow-up regarding corrective action management (e.g., evaluating whether or not corrective actions have been implemented and are effective)
- assistance in identifying managerial controls for transportation and packaging activities to increase efficiency and economy of operations

Requests for transportation- and packaging-related technical assistance from NTP-A should be submitted in writing by the requesting Field Office. Technical assistance needs shall be approved and prioritized by NTP-A.

NTP-A, along with the requesting Field Office, will select the appropriate subject-matter expert(s) to participate in technical assistance activities. Qualified personnel to perform assistance activities will be selected based upon functional expertise.

NTP-A, the Field Office, and the affected contractor operations management will concur on the level of assistance to be provided.

An entrance briefing will be held with the requesting organization, assistance team, and representatives of NTP-A and/or the Field Office, as required. In this briefing, the following minimum requirements for technical assistance will be confirmed:

- scope of transportation and/or packaging assistance to be provided (e.g., identification, root cause, corrective action(s), implementation plan, etc.)
- identify resources support required (e.g., equipment, tools, personal computers, access to telephones, work space, administrative support)

- time frame required for assistance to be performed
- deliverables as a result of technical assistance (e.g., a report or other related documentation, formal root cause analysis, corrective action tracking system, or implementation plan)

Any additional assistance activity identified while onsite that affects the scope of the current assistance activity will be discussed and agreed upon before new assistance activities are begun.

7.0 SELF-ASSESSMENT AND EVALUATOR'S GUIDELINES

7.1 Purpose of the Checklists

The checklists are designed to be used in evaluating the overall performance of the contractor transportation operations in a number of different capacities and functions. These checklists specifically address functions surrounding the shipping, receiving, and transporting of hazardous materials (including radioactive), hazardous substances, and hazardous and mixed wastes.

Some questions in the checklists refer to compliance with various international, federal, state, tribal, or local regulatory standards or DOE Orders. Other questions specially address the effectiveness of the management and operating systems of the contractor's transportation organization. Effective systems are the mechanism through which consistent compliance is achieved. Consistent compliance, in turn, produces higher safety, environmental, and quality performance.

The checklists are a means of collecting data on the contractor's overall transportation and packaging operations. Each question should be answered either "yes," "no" or "not applicable" (N/A). The use of "N/A" should be reserved only for instances in which the activity in question is not required and should not be used if "no" is the more appropriate answer.

In situations where the actual response is not fully "yes" or fully "no", the self-assessor or evaluator should select "no" as the answer. A comment area is also provided to allow the particular organization to add any comment it deems necessary to further clarify the response (e.g. quote procedure title and/or number, brief explanation of the process, etc.).

Only objective evidence should be collected to support the "yes" or "no" answers to questions. Objective evidence is defined in the International Organization for Standards (ISO) document ISO 8402:1994, Quality Management/Assurance Vocabulary as "information which can be proved true, based on facts, obtained through observation, measurement, test or other means." Even if the answer is given through conversation, this must be corroborated either by another person who understands or is involved with that particular process or by observation of the process taking place to verify the answer.

These checklists provide NTP-A, DOE Field Office, and contractor transportation organizations with a "snapshot" of the operation at a particular point-in-time. Over the period of a number of self-assessments and subsequent evaluations, the data gathered may be used to determine the existence of trends within the contractor's systems. This will assist DOE and the contractor alike with issues of nonconformance identification and recommendation through corrective actions.

7.2 Self-Assessor and Evaluator Qualifications

Since NTP-A, DOE Field Offices and contractor transportation organizations will use the same checklists, qualification of personnel performing the self-assessment or evaluation should be similar. It is recommended that self-assessors and evaluators undergo training to ensure competence in the skills required for carrying out these functions. Of particular relevance are techniques of examining, questioning, evaluating, and reporting. Additional skills for managing an evaluation are required such as planning, organizing, communicating, and directing.

Such competence should be demonstrated through written or oral examination, or other acceptable means.

Evaluators should be open-minded and mature; possess sound judgement, analytical skills, and tenacity; have the ability to perceive situations in a realistic way; understand complex operations from a broad perspective; and understand the role of individual units within the overall organization.

Evaluators should be able to apply these attributes in order to obtain and evaluate objective evidence fairly:

- remain true to the purpose of the self-assessment or evaluation without apprehension or favor
- constantly evaluate the effects of evaluation observations and personal interactions during the self-assessment or evaluation
- treat concerned personnel in a way that will best achieve the self-assessment or evaluation purpose
- perform the self-assessment or evaluation process without deviation due to distractions
- commit full attention and support to the self-assessment or evaluation process
- react effectively in stressful situations
- arrive at generally acceptable conclusions based on self-assessment or evaluation observations
- remain true to a conclusion despite pressure to change that is not based on evidence

8.0 PROGRAM EVALUATION

TCEAP is intended to be a means to improve the quality and performance of transportation and packaging operations activities throughout the DOE complex. To ensure the program's validity and proper maintenance, the TCEAP Management Plan shall be self-assessed each fiscal year against applicable criteria and requirements.

NTP-A will review the TCEAP Management Plan and Standard Operating Procedures annually, or as needed, to assure compliance with DOE policy, requirements, and Orders. NTP-A shall review TCEAP Checklists annually, or as needed, to maintain compliance with changing regulations, procedures, and/or policy. NTP-A shall develop an annual evaluation schedule, taking into account information obtained through evaluation and assistance activities, external oversight activities performed by other organizations (DNFSB, DOT, etc.), and requests from the field.

9.0 ANNUAL REPORT

NTP-A will provide an Annual Report of all TCEAP activities for each calendar year. The Annual Report will include basic information about the TCEAP process as well as a summary of all observations made during the year's activities. The report will identify all observations and recommendations made, but will not identify the affected DOE site or contractor. All site or contractor references to specific procedures will be generically identified.

10.0 REFERENCES

1. U.S. Department of Energy (DOE) Order 414.1, *Quality Assurance*, November 24, 1998.
2. U.S. Department of Energy (DOE) Order 460.1A, *Packaging and Transportation Safety*, October 2, 1996.
3. U.S. Department of Energy (DOE) Order 460.2, *Departmental Materials Transportation and Packaging Management*, September 27, 1995.
4. *Requirements for National Transportation Program and/or Field Office for the Planning, Conducting, and Tracking of Contractor Self-Assessment Activities (NTP-A-TCEAP.001)*
5. *Requirements for National Transportation Program and/or Field Offices in the Planning, Conducting, Documenting, Reporting, and Tracking of Compliance Evaluation Activities (NTP-A-TCEAP.002)*
6. *Requirements for National Transportation Program and/or Field Office for the Planning, Conducting, Documenting and Reporting of Technical Assistance Activities (NTP-A-TCEAP.003)*
7. *Type B Accident Investigation Board Report of the December 15, 1997, Leakage of Waste Containers near Kingman, Arizona*
8. *EM-1 Memorandum, Request for Field Manager Certification of Low-Level Waste Packaging and Transportation Practices, dated February 6, 1998*
9. *Container Working Group, April 1998 Report, Recommendations for Meeting Department of Transportation Requirements for Strong-Tight Containers and Industrial Packaging*